

ORTUNITY

CLASSIFICATION: Mechanical Engineer

TENURE: Permanent

TIME BASE: Full Time

SALARY: Range A \$5,098 - \$6,078

Range B \$5,837 - \$7,303 Range C \$6,751 - \$8,447 Range D \$7,631 - \$9,548

LOCATION: ENERGY EFFICIENCY RESEARCH OFFICE

**ENERGY RESEARCH AND DEVELOPMENT DIVISION** 

SACRAMENTO, CA

FINAL FILING DATE: UNTIL FILLED

#### **DUTIES/RESPONSIBILITIES:**

Under the general direction and supervision of the Energy Commission Supervisor II in the Energy Efficiency Research Office, the incumbent provides mechanical engineering support to the Industrial, Agriculture and Water Team. As such, the incumbent develops, implements and administers energy research, development and demonstration (RD&D) efforts related to the industrial, agriculture and water sectors with the goal of advancing science and technologies not adequately addressed by the competitive or regulated markets. The incumbent performs a wide variety of mechanical engineering assignments, such as reviewing and/or preparing engineering studies or evaluations related to energy systems, technologies and practices; reviewing specifications, designs and proposals; and calculating and estimating energy savings, project economics and environmental benefits (e.g., greenhouse gas reductions). The incumbent conducts detailed field inspections during project construction and installations.

The incumbent performs responsible and complex mechanical engineering analyses to support energy RD&D funding; manages RD&D projects; and consults with mechanical engineers and other experts in the field.

#### **WORKING CONDITIONS**

The work is performed in an indoor office and meeting room setting involving sitting, standing, and walking. Travel is required to attend workshops, hearings and meetings. Additional hours beyond an eight-hour workday or forty-hour workweek may be required. While performing the duties described below, the incumbent will be required to work alone and/or in a team environment using a personal computer and appropriate Energy Commission software such as word processing, spreadsheet and data management programs, electronic mail and Internet browsers. The incumbent will participate in meetings with staff from the Energy Commission and with other agencies.

#### **DUTIES AND RESPONSIBILITIES:**

- Technology Assessment. The incumbent will:
  - a) Evaluate and/or prepare engineering assessments and complex evaluations of new, innovative and emerging energy technologies and designs for industrial systems;

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- b) Monitor and validate calculations to determine energy savings, project economics, tons of greenhouse gas emissions avoided and their impact on industrial processes;
- c) Evaluate performance and suitability of components, efficiency and economics of engineering design options for proposed projects;
- d) Read and interpret plans, drawings, specifications and regulations governing mechanical equipment/systems installations and procedures related to industrial processes; and,
- e) Identify and recommend technology gaps that could benefit from RD&D to advance industrial sector energy savings and greenhouse gas reductions. The incumbent also provides technical assistance to other staff in analyzing engineering problems.
- <u>Project Management</u>. The incumbent serves as the project manager for complex research projects with engineering tasks. As such, the incumbent will be responsible for all phases of project management, such as:
  - a) Prepare work statements, budgets, schedules, and contract amendments;
  - b) Identify measurable technical and economic objectives to determine project success;
  - c) Maintain technical and business relationships with the contractor;
  - d) Review monthly progress reports and prepare evaluation of the projects and brief management, as needed;
  - e) Inspect projects to ensure they meet technical, fiscal, and administrative objectives; and.
  - f) Review and approve contractor invoices.
- <u>Proposal Evaluation</u>. The incumbent participates in a technical scoring committee and provides his/her mechanical engineering expertise in reviewing proposals to determine how well the project addresses the scope of the solicitation criteria. Examples include the extent the project will:
  - a) Include projected benefits and energy savings that are consistent with engineering laws and principals;
  - b) Address market issues and needs and the resulting impact on the marketplace, and;
  - c) Indicate a likelihood of success based on adequate project budget and identified staff resources. The incumbent prepares written findings of such evaluations for use by a technical scoring committee.
- Research Results Dissemination. Oversees the finalization of the most complex project reports, fact sheets, and other documents to disseminate research results and lessons learned to Energy Commission staff and others with a focus on transferring information that provides significant public benefits to California and meets the state's energy policies and goals.
- Consult with Stakeholders. The incumbent consults with research organizations, federal
  and state government agencies, utility representatives and other technical experts to
  identify RD&D opportunities for alternative and advanced energy systems or technologies
  in California. Through on-going discussions and interactions with market stakeholders, the
  incumbent defines, develops and implements projects that provide significant public
  benefits to California and meet the policy and technical objectives of the Energy
  Commission's RD&D Program.

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Other Duties. Other duties as required consistent with the specification of this classification.

# **DESIRABLE EXPERIENCE/QUALIFICATIONS:** The successful applicant should have:

- Excellent interpersonal skills and expected to work within a large team environment.
- Ability to communicate complicated information in a simple, consumer-friendly manner.
- Ability to coordinate interdisciplinary projects.

WHO MAY APPLY: Interested applicants must submit a completed Standard State Application (Form STD. 678) with an original signature to the contact/address listed below. Electronic applications will be accepted. You must clearly indicate the basis of your eligiblity (i.e. list, transfer, SROA/Surplus, reinstatement, etc.). RPA 310-033 and Position #535-310-3583-008 in the "Explanation Section" of the STD 678. Resumes are welcome but do not take the place of the completed State Application STD 678. Applications will be screened for experience and only the most qualified will be contacted for an interview. NOTE: Failure to comply with the filing instructions and incomplete applications received will not be considered.

Will consider a Training and Development (T&D) Assignment.

**Please Note:** Possession of the minimum qualifications will be verified prior to the interview and/or appointment. If it is determined an applicant does not meet the minimum qualifications, the application may be forwarded to the State Personnel Board for review and the applicant's name may be removed from the eligibility list.

#### SUBMIT APPLICATIONS TO:

Personnel Services Office Attn: RPA #310-033 1516 9<sup>th</sup> Street, MS-3 Sacramento, CA 95814 Phone: 916-654-4305 the Deaf or Hearing-Impaired From hTDD Phones: 1-800-735-2929 From Voice Phones: 1-800-735-2922

California Relay (Telephone) Service for

personnelservices@energy.ca.gov